DIGITALLY-GENERATED LIGHTING FOR VIDEO CONFERENCING APPLICATIONS

ABSTRACT OF THE DISCLOSURE

A method of improving the lighting conditions of a real scene or video sequence. Digitally generated light is added to a scene for video conferencing over telecommunication networks. A virtual illumination equation takes into account light attenuation, lambertian and specular reflection. An image of an object is captured, a virtual light source illuminates the object within the image. In addition, the object can be the head of the user. The position of the head of the user is dynamically tracked so that an three-dimensional model is generated which is representative of the head of the user. Synthetic light is applied to a position on the model to form an illuminated model.

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